

Appl. No. 09/943,211
Amdt. Dated October 10, 2005
Reply to Office action of July 11, 2005
Attorney Docket No. P13753-2/032868-005
EUS/JIP/05-6179

Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of handling messages at an interface in a node within a packet-switched communication system for avoiding overloading of a processor within said node, said messages transmitted by a plurality of subscriber stations being served by said node, comprising the steps of:

- a) receiving a message having an information element indicating the message's type;
- b) determining whether the message type associated with said received message is a first type or a second type; and
- c) in response to a determination that the determined message type is the first type, processing the received message within said node;
- d) otherwise, in response to a determination that the determined message type is the second type,

determining the total frequency of messages received by said node for said message type;

- b) ~~determining whether a frequency of receipt of messages of a predetermined type~~ the determined total frequency for said message type exceeds a threshold associated with said message type;
- e) handling the message in a normal way if the total frequency does not exceed the threshold; and
- d) discarding and not further processing the message by said node to avoid overloading the processor capacity if the total frequency exceeds the threshold and the message is of the predetermined type.

2. (Original) The method of claim 1, wherein the method is carried out by a serving general packet radio service support node (SGSN) after the SGSN is re-started.

Appl. No. 09/943,211
Amdt. Dated October 10, 2005
Reply to Office action of July 11, 2005
Attorney Docket No. P13753-2/032868-005
EUS/J/P/05-6179

3. (Currently Amended) The method of claim 2, wherein the information element is a local temporary logical link identity associated with a particular one of said plurality of subscriber stations, ~~and whereby messages of another type are handled in the normal way even when the frequency exceeds the threshold.~~

4. (Original) The method of claim 1, wherein the method is carried out by a base station system (BSS) after the BSS is re-started.

5. (Cancelled)

6. (Currently Amended) A method of handling messages at an interface in a node in a packet-switched communication system to avoid overloading processor capacity within said node, said messages transmitted by a plurality of subscriber stations being served by said node, ~~communication system~~, comprising the steps of:

a) receiving an uplink message and reading an information element in a header of the received message;

b) accessing a table based on the read information element to determine a status of the read information element as either already known or unknown to said node;

c) based on the table access, handling the message in a normal way if the information element is known within said node, and otherwise carrying out the following steps:

d) updating a frequency of receipt of unknown read information elements;

e) comparing the updated frequency to a threshold predefined within said node;

f) if the updated frequency is less than the threshold, handling the message in the normal way, and otherwise carrying out the following steps:

Appl. No. 09/943,211
Amdt. Dated October 10, 2005
Reply to Office action of July 11, 2005
Attorney Docket No. P13753-2/032868-005
EUS/J/P/05-6179

g) determining whether the read information element is of a predetermined type;

h) if the read information element is not of the predetermined type, handling the message in the normal way, and

i) if the read information element is of the predetermined type, discarding the message to avoid overloading the processor capacity.

7. (Original) The method of claim 6, wherein the method is carried out in a serving general packet radio service support node (SGSN) after the SGSN is re-started and the information element is a temporary logical link identity.

8. (Original) The method of claim 6, wherein the method is carried out in a base station system (BSS) after the BSS is re-started and the information element is a temporary logical link identity.

9. (Original) The method of claim 6, wherein the threshold is based on processing resources available in the SGSN for handling messages.

10. (Original) The method of claim 9, wherein the processing resources comprise at least one of an amount of free memory left to the SGSN and a load on a central processing unit of the SGSN.

11. (Original) The method of claim 6, further comprising the steps of determining whether the message includes a second information element that is encrypted, the determining step being carried out if the updated frequency does not exceed the threshold and before handling the message in the normal way, and if the second information element is, not encrypted, handling the message in the normal way, but if the second information element is encrypted, discarding the message.

Appl. No. 09/943,211
Amdt. Dated October 10, 2005
Reply to Office action of July 11, 2005
Attorney Docket No. P13753-2/032868-005
EUS/J/P/05-6179

12. (Original) The method of claim 6, wherein if the information element is not of the predetermined type, a frequency of receipt of messages having information elements of another type is compared to a second threshold, and if the second threshold is not exceeded, the message is handled in the normal way, but if the second threshold is exceeded, the message is discarded.

13. (Original) The method of claim 12, further comprising the steps of determining whether the message includes a second information element that is encrypted, the determining step being carried out if the frequency does not exceed the second threshold and before handling the message in the normal way, and if the second information element is not encrypted, handling the message in the normal way, but if the second information element is encrypted, discarding the message.

14. (Cancelled)